

ABSTRACT

A new method to form metal silicide gates in the fabrication of an integrated circuit device is achieved. The method comprises forming polysilicon lines overlying a substrate with a dielectric layer therebetween. A first isolation layer is formed overlying the substrate and the sidewalls of the polysilicon lines. The first isolation layer does not overlie the top surface of the polysilicon lines. The polysilicon lines are partially etched down such that the top surfaces of the polysilicon lines are below the top surface of the first isolation layer. A metal layer is deposited overlying the polysilicon lines. A thermal anneal is used to completely convert the polysilicon lines to metal silicide gates. The unreacted metal layer is removed to complete the device.